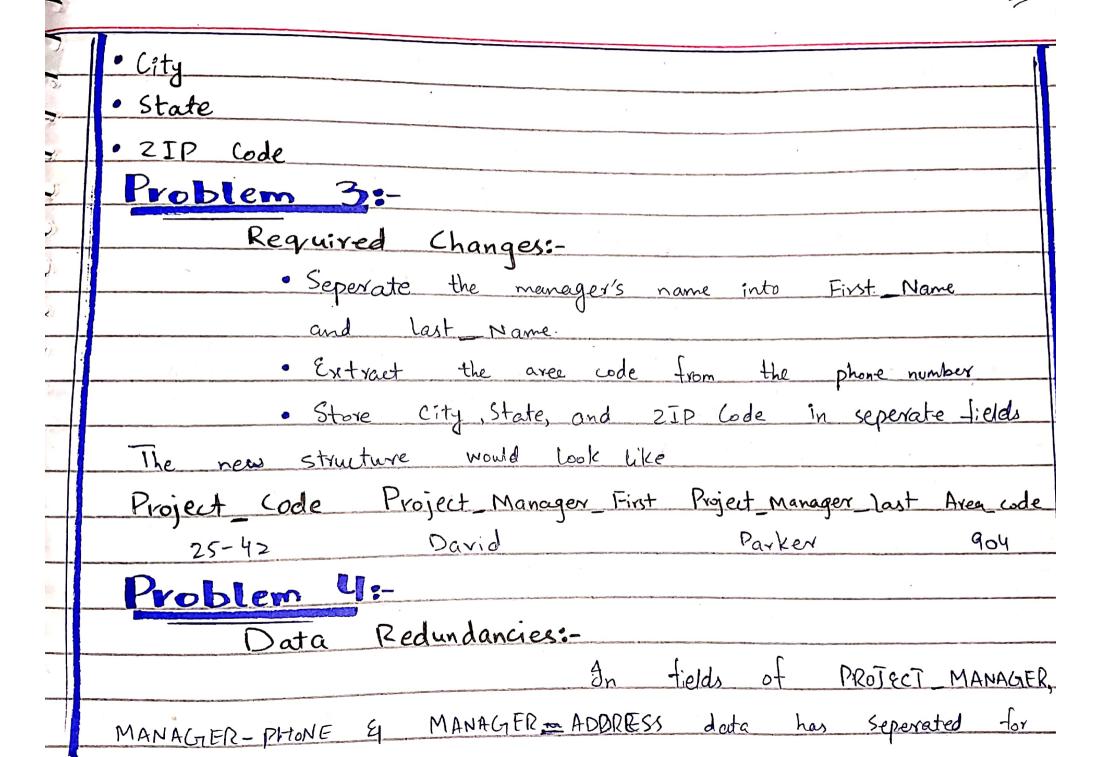
DATABASE SYSTEM
Assignment # 0
NAME:-
ROLL NO:-
110839
FIGURE P 1.1
Problem 1:-
The file structure in Figure P1.1 contains
7 records. Each records contains the following fields
· Project_code
· Project_Manager
· Manage_Phone

	· Manager_Address
	Project Dil o
	· Project_Bid_Price
	Thus each record has 5 fields
	P ₁
	Problem 2:-
	The city information is embedded with
	Manager Address Sold International International
	Manager Address field, which makes it difficult to
	filter and sort data by city. Extracting a listing
	of projects based on city would require manual
	text parsing or complex string manipulation which
	is inefficient.
	Solution:-
	To resolve this, the database should be
	normalized by seperating the manager's address into
7	·
	distinct fields
	Street Address



multiple times Anomalies: · Update Anomaly:-4f a manager's phone number changes, it must be updated in multiple times. · Insertion Anomaly:-New projects cannot be assigned a manager without including redundant address and phone Data. · Deletion Analomy:-Deleting a project would remove all traces of a nanager if they manage only one project.

	FIGURE P 1.5
	Problem 5:-
	The Emp_Name 4 Emp_Phone tields are
	repeated multiple times which com become a serious
	data redundancy.
	The Job-Code Gy Job-Chg-Hour fields are
	also repeated.
	One to these redundancy storage requirements can be increased by can read top other issues too.
	Problem b:-
	To reduce the data redundancy Emp-Name
	Enp-Phone & make a seperate field of Emp-ID
	which consists of other 2-
	Problem 7:-
	Proj Num, Proj Name
. A.	· Emp-Name, Emp-Phone

- · Job_ Code, Job_CHG-Hour
- · Proj Hours.

Problem 8:-

Employee Table: Emp_ID, Emp_Name, Emp_Phone.

Project Table: Proj_Num, Proj_Name

Job Table: Job_Code, Job-Description.

Assignment Table (to Link employee), projects & jobs): Emp-ID

Proj-Nung Job-Code, Proj- Hours